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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,783	03/28/2001	Akira Noda	0445-0295P	1034

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EXAMINER

ANDERSON, CATHARINE L

ART UNIT PAPER NUMBER

3761

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,783

Applicant(s)

NODA ET AL.

Examiner

C. Lynne Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tao et al. (WO 99/60973) in view of Morman et al. (5,883,028) and further in view of Jordan et al. (US 2001/0031954 A1).

Tao discloses all aspects of the claimed invention, but remains silent as to the L* and C* values of the printed area, the light transmittance of the nonwoven material, and the basis weight of the nonwoven material used in the backsheet.

Tao discloses an absorbent article, as shown in figure 10, comprising a liquid-permeable topsheet 54, a liquid retentive absorbent member 66, and a liquid-impermeable backsheet 52. The backsheet 52 is constructed from a breathable film material, as disclosed on page 5, lines 22-27. The film is printed with a multicolored graphic pattern, as disclosed on page 6, lines 21-28. A nonwoven material is laminated to the outer side of the film, as disclosed on page 9, lines 9-12. Tao discloses performing color difference tests on his backsheet film material, determining the preferred b* value for the material is between 0.0 and 0.5, making the material white or very close to it.

Tao does not disclose performing color difference tests on the printed area of the backsheet 52. Tao does, however, disclose using bright colors, such as royal blue, sky blue, and dark blue, in the printed area of the backsheet 52, as described on page 6, lines 21-26. These colors represent a wide range of shades ranging from light to dark, with royal blue clearly being neither very light nor very dark. The L^* value is a measure of the darkness of a color, with 100 being so light it is white, and 0 being so dark it is black. Royal blue, being neither very light nor very dark, inherently lies somewhere near the center of the range, and therefore would fall into the range for the L^* value disclosed in the instant claim 10. Likewise, the colors disclosed by Tao would inherently fall within the broad range for the C^* value disclosed in the instant claim 10, since the C^* value measures the chroma, or intensity, of the color. The printed areas of Tao therefore inherently meet the limitations of the instant claim 10.

Tao discloses printing designs on the backsheet of a diaper that are visible through the nonwoven material laminated to the backsheet. Jordan discloses a diaper having a backsheet comprising an impermeable layer with a printed graphic pattern and an outer layer comprising a fibrous nonwoven material, as described on page 2, paragraph 0013. The nonwoven material has a light transmittance of 80%, as described on page 1, paragraph 007, so that the printed graphic pattern is highly visible through the nonwoven material, as described on page 1, paragraph 008. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the nonwoven material

of Tao with a light transmittance of 80%, as taught by Jordan, so that the printed graphic pattern is highly visible through the nonwoven material.

Tao discloses laminating a nonwoven material to a breathable film material with a basis weight of 20 to 40 g/m², as described on page 8, lines 4-9. Tao, however, remains silent as to the basis weight of the nonwoven material itself. Morman discloses a material for use as a diaper backsheet 40 comprising a breathable film 32 with a nonwoven material 12 laminated to its outer side, as described in column 1, lines 5-8, and column 9, lines 25-33. Morman discloses a basis weight of the nonwoven material as being between 30 and 45 g/m² in column 8, lines 60-64. A nonwoven material having this basis weight strengthens the film to which it is laminated without reducing the breathability of the film, as described in column 7, lines 48-50. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the nonwoven material of Tao with a basis weight of between 30 and 45 g/m², as taught by Morman, to provide sufficient strength without reducing breathability.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tao et al. (WO 99/60973) in view of Morman et al. (5,883,028) and Jordan et al. (US 2001/0031954 A1), as applied to claim 10 above, and further in view of McCormack et al. (6,719,742).

Tao discloses all aspects of the claimed invention with the exception of a b* value less than 0 and greater than -0.5.

Tao discloses on page 5, lines 12-13, that consumer acceptance for films having a yellow tint is low.

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McCormack discloses a film laminate for use as a backsheet of an absorbent article, as described in column 1, lines 8-10. The film has a b^* value of -0.2 , as disclosed in column 18, lines 19-29, which results in a significantly reduced yellow tint.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the backsheet of Tao such that it has a b^* value of -0.2 , as taught by McCormack, in order to reduce the yellow appearance of the backsheet, since Tao discloses a yellow appearance is undesirable.

Response to Arguments

Applicant's arguments filed 10 May 2004 have been fully considered but they are not persuasive.

In response to the applicant's argument that Tao et al. fail to disclose L^* and C^* values, it is noted that while Tao does not explicitly disclose the L^* and C^* values for the printed areas, Tao discloses colors which inherently fall within the claimed ranges for the L^* and C^* values.

Tao discloses printed areas, as described in column 6, lines 21-26, comprising various colors, including royal blue. All colors in the visible spectrum are plotted on a 3-dimensional graph wherein the y-axis represents the L^* value, the x-axis represents the a^* value, and the z-axis represents the b^* value. Since white has an L^* value of 100 and black has an L^* value of 0, all shades of colors fall somewhere between 0 and 100 depending on their lightness or darkness. Royal blue, which lacks gray undertones and is neither very light nor very dark, will therefore have a mid-range L^* value. The Hunter Lab, which developed the

L, a, b color scale, gives blue an L^* value of 69.7 in slide 72 of 124 in the slideshow "The Basics of Color Perception and Measurement" available <http://www.hunterlab.com/pdf/color.pdf> on August 30, 2004.

All colors also have a C^* value representing the chroma, or intensity, of the color. The claimed invention discloses a very broad range of C^* values, from 20 to 120. Tao discloses a range of colors, as described above, including shades of blue ranging from pale (sky blue) to intense (royal blue, red). For example, slide 72 of 124 in the slideshow "The Basics of Color Perception and Measurement" available <http://www.hunterlab.com/pdf/color.pdf> on August 30, 2004, gives red a C^* value of 61.8. As with the L^* values, the C^* values of the instant claim are inherent to the colors disclosed by Tao.

In response to the applicant's argument that the light transmittance and b^* values disclosed by Jordan and Tao respectively show only a slight overlap with the claimed ranges, it is noted that overlap of the entire range is not necessary. Jordan and Tao fulfill the limitations of the instant claim.

In response to the applicant's argument that it would not be obvious to one of ordinary skill to change the b^* value of Tao, it is noted that McCormack teaches an advantage to a b^* value of -0.2 , which provides the motivation to modify the article of Tao in view of McCormack. Tao discloses that a significant yellow tint to the backsheet of an absorbent article has been shown to be displeasing to consumers. McCormack discloses a b^* value of -0.2 to reduce the yellow tint of the backsheet. Modifying the article of Tao in view of McCormack is therefore proper, and the rejection stands.

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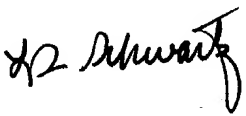
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on (703) 305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CUA
cla
August 30, 2004


Larry I. Schwartz
Supervisory Patent Examiner
Group 3700